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Representatives, Roll Calls, and Constituencies

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To Mary and Michael

3 A Simple Theory of Constituency Influence

Introduction

When combined, the set of ideas advanced in Chapter 2 constitute a highly simplified model of a representative's world as he ponders whether to cast a yea or nay. In this chapter we will ascertain how model representatives would behave in several of the contingencies which might arise in this model world. Three constituency configurations are examined. First, we will analyze the voting decision given a consensual or homogeneous district; i.e., a situation in which the groups who possibly care about the issue would agree on what the representative should do. Such homoegeneity seldom will hold across *all* issues in a real world district, but on particular issues it is probably often the case that only one group cares. Additionally, the fairly cornmon "God, Motherhood, and Apple Pie" votes no doubt find all significant constituency groups in accord.

Our other two configurations involve the voting decision given a conflictual or heterogeneous district; i.e., a situation in which two significant constituency groups are in opposition. First, we will exarnine the voting decision when the issue is highly salient--sure to become a campaign issue. Then we turn to the more general case in which potential conflict exists, but the campaign impact is less certain.

To give the reader a better idea of where we are going, we suggest here that the analysis in this chapter provides a plausible model of the voting behavior of representatives from safe and marginal districts. That is, in the real world, districts which vote overwhelmingly for a representative are those which tend to be homogeneous in their structure of group interests. Conversely, districts which give representatives narrow margins are those which contain conflicting group interests. That electoral safety goes with district homogeneity and electoral marginality with district heterogeneity is by no means a new argument. In Chapter 5 we note the works of numerous political scientists who have made such an observation. Additionally, we present some data bearing on the correspondence. Interestingly, though, the analysis in this chapter helps to explain just *why* safety should accompany district homogeneity and marginality heterogeneity. We shall elaborate as the analysis proceeds.

Roll-Call Voting Decisions with a Consensual Constituency

Consider the decision matrix given in Table 2-2 of the previous chapter: $c_j > 0$ for only one group in the constituency, or the entire constituency constitutes a single group for which $c_j > 0$. A representative never faces a less ambiguous situation. How does he behave?

For a maximizer, the answer is trivial. Voting with one's constituents is a dominant strategy: no matter what the state of nature, voting with one's constituents is at least as good and sometimes better than voting against them. This conclusion holds no matter what the strength of the group nor what the probability that they care. Thus, given a consensual district a maximizer is completely a slave to constituents' preferences. Empirically, then, if safe districts are those which tend to be homogeneous, and new representatives tend to be maximizers, one would expect that newly elected representatives from safe districts are maximally responsive to constituency wishes.

Now consider a maintaining representative. Recall that a maintainer regards an acceptable voting strategy as a discrete probability distribution over the strategy set such that the expected value of his vote, $E(\Delta p)$, exceeds or equals zero. Having attained his personal p^*, the maintainer is content to do no worse than break even on each vote. The exact maintaining strategy is easily calculated:

$$E(\Delta p) = 0 = Qcx + Q(1-c)0 + (1-Q)c(-z) + (1-Q)(1-c)0$$

$$= Qcx - xz + Qcz$$

$$cz = Qc(x+z)$$

$$\frac{z}{x+z} = Q \tag{3.1}$$

Equation (3.1) indicates the maintaining strategy for the homogeneous case. For example, if $z = .03$, $x = .02$, then $Q = .6$. Thus, a maintainer can vote with his constituents with any probability between .6 and 1.0 and still expect to satisfy the condition $p \geqslant p^*$. If his party leader is pushing him to vote against constituents, he can vote so as to maintain p exactly unchanged and still support the party leader with probability .4. Notice that $.5 \leqslant Q \leqslant 1$ because $z \geqslant x$, and $x + z > 0$.[a] A maintainer will end up voting with his constituents at least half the time on the average.

Several other features of Equation (3.1) deserve notice. First, Q increases or remains constant at its maximum as z increases: the greater the threat to a

[a]Recall that the representative includes in his decision problem only those G_j who (1) have nonzero c_j, and (2) are significant: $(x_j + z_j) = S_j > 0$.

representative's reelection that a constituency group can pose, the higher the probability that the representative must accede to their wishes. The proposition seems eminently plausible. Second, Q decreases as x increases: the greater the help to a representative's reelection that a constituency group can offer, the lower the probability that the representative must vote in accord with their wishes. This second proposition reflects the maintainer's intention only to maintain his probability of reelection. Within the framework of the theory, then, one finds a difference between the effects of gains and losses. So far as influencing a maintainer goes, potential losses are more important than potential gains. Constituents should threaten the stick, not promise the carrot. Notice finally that if $x = 0$, $Q = 1$ regardless of the value of z. In this case the maintaining strategy coincides with the maximizing strategy.

The $x = 0$ case has two seemingly plausible empirical interpretations. First, in some districts there exist "gut" issues for which constituents consider a vote with them as the very *sine qua non* of representation. A right vote merits no reward—any dutiful representative could only think of voting one way. Conversely, a wrong vote on such issues amounts to an abject betrayal of the representative's trust. These are the crucial issues on which constituency overrides all other considerations. As one example, we suggest Civil Rights votes in many Southern districts during the 1950s.[b] Abortion votes in some heavily Catholic districts provide another example.[c] On votes like these, homogeneous constituencies produce only maximizers.

A second interpretation involves not intense, "gut" issues, but rather "God, Motherhood, and Apple Pie" issues. Although opinion is homogeneous in such cases, it is likely that $x = 0$, since a representative hardly can expect to be rewarded for casting a vote in favor of Motherhood. Of course, a vote against Motherhood is another matter, so that $z > 0$.

[b]In their representation study Miller and Stokes relate the story of the defeat of Brooks Hays by Dale Alford in the Arkansas 5th District. Hays was perceived as a "moderate" on Civil Rights owing to his refusal to sign the Southern Manifesto, and to his service as an intermediary between Washington and Little Rock during the school crisis. More extreme than Hays, Alford won on a *write-in* vote! Moreover, *every* constituent interviewed had read or heard something about *both* candidates. The comparable national figure was 24 percent. See Miller and Stokes, "Constituency Influence in Congress," pp. 50-51.

[c]Consider the following case: In 1970 the "liberal" abortion bill passed by the New York Senate lay dead in the House apparently, 74 - 74 (a majority of the full membership of the House—76—is required to pass legislation). But before the Chair could announce the defeat of the bill, Representative George Michaels, a Democrat from a heavily Catholic district stepped to the microphone and changed his vote from "nay" to "aye." Speaker Perry Duryea then cast the 76th and winning vote. Michaels, previously best known for his bill naming the bluebird the state bird of New York, expressed the opinion that his vote switch was political suicide. Happily for believers in constituency influence, he was correct. Michaels was denied the nomination of the local party, defeated in the primary, and trounced in a three-way election. For those who might be interested, Michaels, a Jew, reported acting as he did from family pressures (one son called him a "political whore"). See the *New York Times*, Apr. 10, 1970, 1:8, 42:1, Apr. 20, 1970, 63:4; Apr. 23, 1970, 36:2; June 5, 1970, 40:4; Nov. 4, 1970, 19:1; Nov. 5, 1970, 43:3.

Another limiting case of empirical interest occurs in the event that a single group (or a unanimous district) has "make or break" power over a maintainer. That is, the group's support could render him certain of reelection, while their opposition could render him certain of defeat. In this case, the theoretical variables take on their maximum values. These are

$$z = p$$

$$x = z - \epsilon \quad \text{if } p \leqslant .5 \qquad \epsilon \geqslant 0$$

$$x = 1 - p \quad \text{if } p > .5$$

$$\text{If } p \leqslant .5,\; Q = \frac{p}{p - \epsilon + p} = \frac{p}{2p - \epsilon} \text{ and } \lim_{\epsilon \to 0} Q = \frac{1}{2}$$

$$\text{If } p > .5,\; Q = \frac{p}{1 - p + p} = p.$$

Thus, Q tends to ½ or to p *whichever is larger* in the case where a totally dominant constituency group exists. Interestingly, where one constituency group overshadows all others, the higher a maintainer's probability of reelection, the more bound to that group he becomes. A possible example of this phenomenon is the Southern Democratic Congressmen during much of the 1950s and 1960s. Because of constituency-legislative party conflict one might expect most of the Southern Democrats to be maintainers. On Civil Rights legislation their relevant constituency groups were blacks and whites, but owing to the disenfranchisement of the former, the effective constituency was homogeneous. Given that whites were a powerful enough group to make or break the Representative, one would expect that these Representatives showed a fealty to constituents which directly mirrored their own probability of reelection. The more confident they were, the more adamantly opposed to Civil Rights legislation they would have been. Although variation among the Southern Democrats on Civil Rights votes was slight, this hypothesis may be testable.

Leaving the question of payoffs aside for a moment, we call attention to a very interesting feature of Equation (3.1). In making his voting decision one might expect the representative to take into account the payoffs associated with each alternative and the probabilities of the states of nature. In our notation, $Q = f(c,x,z)$. But notice that one can write Equation (3.1) as $Q = f(x,z)$. That is, in the one group case the maintainer's choice of voting strategy does not depend on his estimate of the probability that the group cares. Whether $c = .01$ or $.99$ makes no difference. And, as previously mentioned, this conclusion applies as well to a maximizer's voting. Obviously, voting with the constituency group remains a dominant strategy no matter where in the internal (0, 1.0) c falls.

Thus, *where an issue is of potential concern to only one group in a district, the actual probability they will respond to it is irrelevant to the representative's voting decision.*

Recall now the major reason for despairing of the existence of constituency influence: mass ignorance and apathy about legislative issues and records. But we have just found one theoretical situation in which mass unawareness of the representative's actions does not matter, so long as someone may be watching somewhere ($c > 0$). Thus, while the extent of voter awareness and information may be an interesting empirical question, a highly informed, issue-conscious constituency is *not* a necessary condition that must be met in order to link the representative's voting to his constituents' preferences.

Now let us turn to a slightly more complicated type of constituency homogeneity: two or more significant groups might be expected to care about the issue, but they would agree upon how the representative should vote.[d] Table 3-1 illustrates the voting decision problem for two significant groups.

Evidently, most of our previous conclusions do not change. For a maximizer, voting with the constituency groups is the dominant strategy, irrespective of the precise values of x, z, and c. For a maintainer, the maintaining strategy is given by Equation (3.2):

$$Q = \frac{c_1 z_1 + c_2 z_2}{c_1 x_1 + c_2 x_2 + c_1 z_1 + c_2 z_2} \tag{3.2}$$

Again, $Q \geqslant .5$ because $z_i \geqslant x_i$. And Q increases or does not change as either z_i increases, while Q decreases as either x_i increases. If $x_1 = x_2 = 0$, the maintaining strategy coincides with the maximizing strategy; i.e., $Q = 1$. These facts are exactly analogous to the one-group case and extend to any number of groups in the homogeneous case.

The one conclusion which changes concerns the relevance of the c_i for

Table 3-1
Voting Decision Given a Two-Group Consensual Constituency

Strategy \ State / Probability	$G_1 G_2$ $c_1 c_2$	$G_1 \sim G_2$ $c_1(1 - c_2)$	$\sim G_1 G_2$ $(1 - c_1)c_2$	$\sim G_1 \sim G_2$ $(1 - c_1)(1 - c_2)$
with	$x_1 + x_2$	x_1	x_2	0
against	$-z_1 - z_2$	$-z_1$	$-z_2$	0

[d]Perhaps real world representatives tend to combine all groups into two: pro and anti. If such were the case, the two-group consensual constituency would reduce to the one-group case just analyzed. Still, in the presence of significantly different c_i, keeping the multigroup structure of the problem intact seems advisable.

maintainer voting. Although the c_i again are irrelevant for maximizer voting, they are irrelevant for maintainer voting only in two special cases. First, if all the x_i equal zero, $Q = 1$ and does not vary as any of the c_i change. Second, if the c_i are equal, they are irrelevant to the maintainer's choice of strategy. Equality could arise either because of issue salience ($c_i = 1, \forall_i$), or because extreme uncertainty leads the representative to adopt a version of Laplace's Principle.[e]

Somewhat disappointingly, when the c_i are relevant to the voting decision, one cannot say exactly how they are relevant without additional conditions being imposed on the payoffs. One might suppose that as either c_i increases the probability a maintainer has to vote with his constituents similarly increases. Such is not the case. Q may increase, decrease or remain constant as the c_i vary. As constituted, the maintainer model yields no unique prediction about the relationship between Q and the c_i.

This completes our analysis of the consensual constituency. To recapitulate, the following set of conclusions follows from the analysis:

1. Maximizers always vote with constituents; maintainers do so at least half the time on the average.
2. In the one-group case, no representative votes any differently when his estimate that constituents care is high from when it is low.
3. In the multigroup case, maximizers still are not influenced by the probabilities that constituents care; maintainers are not influenced only if $x_i = 0, \forall_i$, or if $c_i = c_j, \forall_{i,j}$.
4. The voting flexibility of maintainers increases as the perceived positive sanctions of constituents increase, while flexibility decreases as perceived negative sanctions increase (unless $x_i = 0, \forall_i$, in which case maintaining requires maximizing which involves no flexibility).

Consider briefly now the implications of these conclusions for the voting behavior of representatives from safe districts. If safe districts tend to be homogeneous districts, one should not expect to find safe representatives free to ignore their constituents as some have suggested. Rather, these representatives will vote with constituents at least half the time on average. Indeed, the analysis suggests the major reason consensual districts tend to be safe districts. In such districts there exists a maximizing strategy which leads *at worst* to no loss in subjective probability of reelection and usually a gain. Similarly, maintaining strategies always exist even though they may coincide with maximizing strategies at times. By the intelligent exercise of maximizing and maintaining strategies, a representative can render his seat safe and maintain it in that condition. As we

[e]The Laplace Principle of Insufficient Reason is a classical procedure for decision making under uncertainty. According to this principle, if one is totally uncertain about the probabilities of future states of the world, one should assume they are equiprobable. In the case of independent c_j the Laplace Principle is equivalent to assuming $c_j = c_k = .5, \forall_{j,k}$.

shall see, such a happy situation does not always exist in conflictual constituencies. For this reason such districts tend to be competitive.

Roll-Call Voting Decisions with a Conflictual Constituency and Highly Salient Issues

From a situation of blissful constituency harmony, we now move to one of deep constituency division. Two significant groups hold opposing preferences on a highly salient issue. What kind of voting should one anticipate from a representative of this heterogeneous constituency? His voting decision problem appears in Table 3-2.

Let us assume the representative is certain that the groups care; i.e., $c_1 = c_2 = c = 1$. Moreover, let us begin by assuming the groups are evenly matched; i.e., $S_1 = S_2$. This special case poses a quandary for the representative. If faced with many decisions like this, he cannot long survive in the electoral area.

Consider first the maximizer. His expected return from a_1 is $c(x_1 - z_2)$, and from a_2, $c(-z_1 + x_2)$. From the identity, $S_j = (x_j + z_j)$, one sees that $c(x_1 - z_2) = c(-z_1 + x_2)$. Thus, $E(a_1) = E(a_2)$. Both strategies yield the same payoff. Furthermore, that payoff is nonpositive.

Proof

Assume the contrary: $E(a_1) = E(a_2) > 0$.

Then $cx_1 > cz_2$ (a)

and $cx_2 > cz_1$ (b)

Applying the assumption that $z_j \geqslant x_j$ to (a) and (b),

Table 3-2
Voting Decision Given a Two-Group Conflictual Constituency

Strategy \ State / Probability	$G_1 G_2$ $c_1 c_2$	$G_1 \sim G_2$ $c_1(1 - c_2)$	$\sim G_1 G_2$ $(1 - c_1) c_2$	$\sim G_1 \sim G_2$ $(1 - c_1)(1 - c_2)$
with G_1	$x_1 - z_2$	x_1	$-z_2$	0
against G_1	$-z_1 + x_2$	$-z_1$	x_2	0

$$cz_1 \geqslant cx_1 > cz_2 \qquad \text{(c)}$$

$$cz_2 \geqslant cx_2 > cz_1 \qquad \text{(d)}$$

(c) and (d) are contradictory, thereby falsifying the hypothesis that $E(a_1)$ and $E(a_2)$ are both equal and positive. One sees then that the maximizer finds himself in a situation in which maximizing has a trivial meaning. His strategies are equivalent in yielding the same nonpositive expected value. Only if $z_1 = x_1 = z_2 = x_2$ will the maximizer's probability of reelection not fall ($E(a_1) = E(a_2) = 0$). In all other cases the expected values of his strategies are negative.

Similarly, the fact that $E(a_1) = E(a_2) \leqslant 0$ implies that a maintaining strategy exists in only one special case, namely, if $z_1 = x_1 = z_2 = x_2$ which implies that no matter what the maintainer does, he just exactly breaks even: every strategy is a maintaining strategy. In all other cases no maintaining strategy exists; i.e., the maintainer cannot maintain. He loses.

So, one sees that in an evenly divided, polarized constituency, neither maximizer nor maintainer usually can expect anything but a decline in his subjective probability of reelection. In this special case all voting strategies yield identical, generally unsatisfactory payoffs. A representative who faced such decisions continually inevitably would be defeated.

But, let us proceed to the more general case of $S_1 \neq S_2$. As specified in Chapter 2, assume that the groups are ordered from stronger to weaker; i.e., $(z_1 + x_1) > (z_2 + x_2)$. The ambiguity of the equal strength case now disappears, particularly for the maximizer. One can show easily that $E(a_1) > E(a_2)$ thereby implying that a maximizer always should vote with the stronger group.

Proof

$$E(a_1) - E(a_2) = cx_1 - cz_2 - cx_2 + cz_1$$

$$= c(S_1 - S_2)$$

which of course is positive if $S_1 > S_2$.

Note that the maximizing strategy is not necessarily a profitable one. That is, although $E(a_1) > E(a_2)$, $E(a_1)$ may be negative. In such a case the maximizing strategy is simply a loss-minimization strategy—the lesser of two evils. Thus, given high-issue salience, even unequal group strength is not sufficient to get the maximizer out of the woods. By now, some implications for the voting behavior of marginal representatives are emerging, but we will delay a discussion until analyzing the behavior of the maintainer.

Given that $c_1 = c_2 = 1$, and $S_1 > S_2$, Equation (3.3) is the maintaining strategy

$$Q = \frac{z_1 - x_2}{z_1 - x_2 + x_1 - z_2} \tag{3.3}$$

Existence is the first question of interest, In order for a maintaining strategy to exist, one must have

$$0 \leqslant \frac{z_1 - x_2}{z_1 - x_2 + x_1 - z_2} \leqslant 1$$

Given the assumption that $z_j \geqslant x_j$, the preceding condition holds if and only if condition (3.4) holds

$$x_1 \geqslant z_2 \tag{3.4}$$

From condition (3.4) one sees that even though the groups are not precisely equal in strength, if $x_1 < z_2$, the maintainer has no maintaining strategy. In fact, under certain conditions no maintaining strategies may exist even if the groups are not nearly comparable in strength. For example, if a strong group practices retribution (z_1 large) but not reward (x_1 small), condition (3.4) may not be met, even though the opposing group is rather weak. But despite a number of possible empirical interpretations the relation $x_1 < z_2$ provides a general indicator of the constituency conditions which make life difficult for maintainers. Note that if $x_1 = z_2$, $Q = 1$; i.e., maintaining and maximizing coincide.

Given that a maintaining strategy does exist in the $S_1 > S_2$ case, what can one say about it? First, Q is greater than one-half.

Proof

By Assumption,

(a) $z_1 \geqslant x_1$

(b) $z_2 \geqslant x_2$.

Given that condition (3.4) holds, (a) and (b) imply (c):

(c) $z_1 \geqslant x_1 \geqslant z_2 \geqslant x_2$, (where at least one inequality is strict because $S_1 > S_2$)

therefore

(d) $(z_1 - x_2) > (x_1 - z_2)$.

Adding $(z_1 - x_2)$ to both sides of (d),

$$\text{(e)} \quad 2(z_1 - x_2) > (x_1 - z_2) + (z_1 - x_2).$$

Clearly, any positive fraction with the right-hand member of (e) as the denominator will be greater than a fraction having the same numerator but the left-hand member of (e) in the denominator. In particular,

$$Q = \frac{z_1 - x_2}{(x_1 - z_2) + (z_1 - x_2)} > \frac{z_1 - x_2}{2(z_1 - x_2)} = \frac{1}{2}. \qquad \text{Q.E.D.}$$

So, if a maintaining strategy exists in the conflictual, high-salience case, that strategy establishes a lower bound on the representative's voting such that he always votes for the stronger group with probability greater than one-half. Depending upon the payoff values, he may have much voting freedom, or he may have little. Unfortunately, though, one can draw no firm conclusion about this matter, for Q does not vary uniformly with variations in group strength. Consider the following examples:

1.

$z_1 = .15$	$z_2 = .15$
$x_1 = .15$	$x_2 = .14$
$S_1 = .30$	$S_2 = .29$

$$\therefore S_1 - S_2 = .01$$

$$Q = \frac{.15 - .14}{.15 - .15 + .15 - .14} = 1.0$$

2.

$z_1 = .40$	$z_2 = .15$
$x_1 = .35$	$x_2 = .15$
$S_1 = .75$	$S_2 = .30$

$$\therefore S_1 - S_2 = .40$$

$$Q = \frac{.40 - .15}{.35 - .15 + .40 - .15} = .56$$

Under case 1 above the groups are as closely matched as is possible (to two decimal places), given $z_j \geqslant x_j$ and condition (3.4). In this situation a maintainer

must vote exclusively with the slightly stronger group. Under case 2 above one group is two and one-half times stronger than the other. Yet in this case a maintainer must vote with the stronger group only with some probability $\geqslant .56$.

According to some traditional arguments, representatives from closely divided districts take moderate, middle-of-the-road positions.[f] We have seen already that if $c_1 = c_2 = 1$, maximizers vote exclusively with the stronger group, in apparent conflict with a spirit of moderation. The preceding examples show that maintainers too, may violate the traditional arguments. In case 1, maintaining requires a representative to adopt a maximizing strategy—a certain vote with the stronger group—even though the weaker group has 97 percent as much strength as the stronger one. In case 2, on the other hand, the weaker group has only 40 percent as much strength as the stronger one, yet the representative can afford to adopt what might be viewed as a moderate voting strategy: voting with the stronger group with probability .56 and with the weaker group with probability .44.

As mentioned, however, Q does not vary uniformly with the difference in strength of the two groups.[g] Rather, Q varies oppositely with the component x_j, z_j of each S_j. Thus, which components of group strength give rise to the disparity in group strength make a great deal of difference. Generally, Q decreases as x_1 increases and decreases or remains constant as x_2 increases. As z_1 increases, Q increases or remains constant, while as z_2 increases, Q increases. Thus, to predict variations in Q from variations in group strength alone is impossible. One needs to know, in addition, the relative influence of positive and negative aspects of group strength. But one might bear in mind the example which shows that maintainers from conflictual districts may be more closely bound to the stronger group if it is barely stronger than its opposition than if it is overwhelmingly stronger.

At this point let us summarize our conclusions about representatives' voting behavior given highly salient issues and conflictual districts.

1. If contending groups are equally matched, maximizers can only minimize their losses, and maintainers generally cannot maintain.
2. If contending groups are not equally matched, maximizers vote always with the stronger group, although a positive payoff is not guaranteed. Maintaining strategies still may not exist, but if they do, the maintainer will vote with the stronger group with probability greater than one-half.
3. Given $x_1 > z_2$; as the threat potential (z_i) of *either* group increases, the probability a maintainer must vote with the stronger group increases. But that

[f] See Chapter 1.

[g] This fact establishes a difference between the maintaining model and Huntington's theory discussed in Chapter 1. Huntington seems to assert that there is an inverse monotonic relationship between the constituency parties' strength differential and their policy differential. We find no uniform relationship in the maintainer model.

probability declines as the reward potential (x_i) of *either* group increases. If $x_1 = z_2$, Q equals one.

4. Maintainer voting does not vary monotonically with the disparity in strength of the contending groups. Maximizer voting does not vary at all with the strength disparity.

Finally, we make the obvious point that the preceding conclusions apply anytime $c_1 = c_2$ regardless of whether they equal one. That is, equality of the c_i insures their irrelevance for voting behavior in the model. If a new issue arises for which a representative is completely uncertain about the likely constituency impact, he might presume that groups are just as likely to care as not to care (a version of Laplace's Principle). This presumption on his part would lead him to vote exactly the same way as he would were he certain that constituency groups cared ($c_j = 1, \forall_j$). Thus, within the present model, we continue to find special cases in which a concerned, issue-conscious constituency is not a necessary condition for constituency influence.

In considering the implications of the analysis for the voting behavior of representatives from marginal districts, we emphasize two points. First, because of the heterogeneous character of their districts, marginal representatives may find themselves in "can't win" situations. No matter how careful they try to be in voting, they sometimes will be unable to prevent their probability of reelection from declining. Thus, the model provides a simple and plausible explanation for the empirical correspondence between district marginality and district heterogeneity. The heterogeneous structure of the district renders it much more difficult for a representative to use his vote profitably than if the district usually has a consensual configuration. Marginality does not produce a relatively high vote of electoral defeat. Rather, heterogeneity produces both marginality and turnover in office.

Second, we find no general tendency for representatives from closely divided districts to adopt moderate, compromise positions. In fact, if the district group structure stays basically the same from issue to issue, maximizers would show anything but compromise positions. Instead they would be voting exclusively with the stronger group. On the other hand, with a highly fluid group structure, one could imagine situations in which voting with the stronger group on each issue could result in an overall record which appeared moderate. For maintainers the situation is even less determinate. In order to predict, one needs to know the values of x_1, z_1, x_2, z_2.

Throughout this section we have assumed that $c_1 = c_2$. Either the representative was certain significant groups cared about the issue, or he was so uncertain of their concern that he presumed they were just as likely to care as not to care. Much of empirical reality no doubt lies between these two poles. So, we now turn to voting decisions given a conflictual constituency when the c_i are not equal.

Roll-Call Voting Decisions with a Conflictual Constituency

If two significant conflicting groups have unequal probabilities of caring, the voting strategies representatives must adopt are dependent on the magnitudes of those probabilities. Naturally, two cases arise. In the first, the stronger group has a higher probability of caring. The second case is reminiscent of a classic subject in democratic theory: the intensity problem.[1] The group that can do less to the representative's probability of reelection than its opposition has a greater likelihood of doing so.[h] We will take both cases in turn for maximizers and then for maintainers.

Because $E(a_1) = (c_1x_1 - c_2z_2)$, and $E(a_2) = (-c_1z_1 + c_2x_2)$, one sees that $E(a_1) - E(a_2) = (c_1S_1 - c_2S_2)$. By the ordering of groups from stronger to weaker, $S_1 \geqslant S_2$. Thus, $E(a_1) > E(a_2)$ if $c_1 > c_2$. The latter would be a sufficient condition for the maximizer's choice of a_1. But even if $c_1 \leqslant c_2$, $E(a_1)$ may be greater than $E(a_2)$ if S_1 exceeds S_2 sufficiently that $c_1S_1 > c_2S_2$. Thus our condition should be more precise. A necessary and sufficient condition for $E(a_1) > E(a_2)$ is simply

$$c_1/c_2 > S_2/S_1 \tag{3.5}$$

That is, even if $c_1 < c_2$, the maximizer still chooses to vote with the stronger group if c_1 is closer in magnitude to c_2 than the strength of the weaker group is to the strength of the stronger group.

In exactly parallel fashion the maximizer votes with the weaker group if

$$c_1/c_2 < S_2/S_1 \tag{3.6}$$

Naturally, if $c_1/c_2 = S_2/S_1$, $E(a_1) = E(a_2)$ and the maximizer is indifferent between his two strategies. Note that if $c_1 = c_2$, (3.5) summarizes our conclusions about maximizer voting in the previous section.

Thus, where the c_i are not equal, they are relevant for voting behavior. In particular, a group may use its high potential to make a campaign issue out of a vote to offset its strength disadvantage on the vote. If a representative estimates that $c_i = 1.0$ for a local sportsmen's club on a gun-control vote and miniscule for

[h]One should be aware that there are differences between the concepts utilized in our analysis and those used in the debate about the intensity problem. For example, we speak of strong and weak groups but do not necessarily equate these with the majorities and minorities of democratic theory. Money can affect p as well as numbers. Additionally, the probability estimate that a group cares seems more a measure of salience than one of intensity, though the two concepts clearly are related. Actually, "intensity" is one of the most difficult of all social science concepts to get a grip on. For discussions, see Alvin Rabushka and Kenneth Shepsle, *A Theory of Democratic Instability* (Columbus: Merrill, 1972), Chapter 2; Douglas Rae and Michael Taylor, *The Analysis of Political Cleavages* (New Haven: Yale, 1970), Chapter 3.

everyone else, maximizing may dictate voting with the hunters despite their small numbers. Of course, we observe such behavior regularly in real world legislatures.

Maximizer voting varies with changes in the c_i exactly as one would expect. Recall again that $E(a_1) = (c_1x_1 - c_2z_2)$, while $E(a_2) = (-c_1z_1 + c_2x_2)$. As c_1 increases, $E(a_1)$ increases or remains constant while $E(a_2)$ falls. This implies that as c_1 increases the likelihood that $E(a_1) > E(a_2)$ increases.[i] The higher the probability that the stronger group cares, the greater the likelihood the maximizer finds voting with them to be his optimal strategy. Conversely, as c_2 increases, $E(a_1)$ decreases while $E(a_2)$ increases or remains constant. This implies that as c_2 increases the likelihood that $E(a_1) < E(a_2)$ increases. The higher the probability that the weaker group cares the more likely is the maximizer to find voting with them his optimal strategy. Whatever one's position on the justice of the matter, maximizers in the model "weigh votes as well as count them."

For maintainers, (3.7) is the maintaining strategy in the unequal c_i case. Of course, if $c_1 = c_2$ (3.7)

$$Q = \frac{c_1z_1 - c_2x_2}{c_1z_1 - c_2x_2 + c_1x_1 - c_2z_2} \tag{3.7}$$

reduces to (3.3). Again, we must ascertain the conditions under which $0 \leqslant Q \leqslant 1.0$. Unlike the earlier case of condition (3.4), the unequal c_i case gives rise to two conditions. A first sufficient condition for the existence of a maintaining strategy is

$$c_1x_1 \geqslant c_2z_2 \qquad \text{or} \qquad c_1/c_2 \geqslant z_2/x_1 \tag{3.8}$$

This condition insures that the numerator of (3.7) is nonnegative (because $z_j \geqslant x_j, \forall_j$) and less than or equal to the denominator. Therefore, $0 \leqslant Q \leqslant 1$. But there also exists another sufficient condition for the existence of a maintaining strategy:

$$c_1z_1 \leqslant c_2x_2 \qquad \text{or} \qquad c_1/c_2 \leqslant x_2/z_1, \tag{3.9}$$

Condition (3.9) insures that the numerator of (3.7) is nonpositive and greater than or equal to the denominator (also nonpositive). But then the absolute value of the numerator is less than or equal to the absolute value of the denominator and cancellation of the minus signs yields $0 \leqslant Q \leqslant 1$.

[i]Strictly speaking, of course, $E(a_1)$ either will or will not be greater than $E(a_2)$. Thus, we use the term "likelihood" in the sense in which it is used in statistics. From an a priori standpoint, high c_1 and low c_2 make it more likely that $E(a_1) > E(a_2)$. Low c_1 and high c_2 make it more likely that $E(a_2) > E(a_1)$.

The two sufficient conditions, (3.8) and (3.9), establish bounds on the ratio c_1/c_2. Specifically, they show that no maintaining strategy exists if

$$x_2/z_1 < c_1/c_2 < z_2/x_1 \tag{3.10}$$

Thus we arrive at a necessary and sufficient condition for the existence of a maintaining strategy in somewhat roundabout fashion: c_1/c_2 must not fall inside the open interval given by (3.10).

One can more readily examine the conditions for the existence of maintaining strategies if we divide these strategies into two classes. We say that a representative has a Type I maintaining strategy if the first sufficient condition (3.8) holds. Similarly, a representative has a Type II maintaining strategy if the second sufficient condition (3.9) holds. Then we can say that inequalities (3.8) and (3.9) are necessary and sufficient conditions for the existence of Type I and Type II maintaining strategies, respectively.

Since the preceding discussion may have seemed rather abstract, we present some fictional decision problems in Table 3-3. In the first case we illustrate a Type I maintaining strategy, $c_1/c_2 = 6/3$, which satisfies (3.8), or alternately, exceeds the upper bound given in (3.10). In case 2, $c_1/c_2 = 1/6$, which satisfies (3.9), or, alternatively, falls below the lower bound in (3.10). Thus we have a Type II maintaining strategy. In case 3, $c_1/c_2 = 3/6$, which lies within the crucial interval (3.10). In this situation no optimal strategy exists. The attempted calculation leads to an absurdity: $Q = -1.0$.

Obviously, the appearance of the c_i in the maintainer's decision rule yields some results which differ from those of the earlier analysis. We have seen three such differences already. First, even if the groups are so closely matched that a maintaining strategy would not exist in the equal c_i case, the maintainer has an optimal strategy if his estimate of the probability the stronger group cares sufficiently exceeds his estimate of the probability the weaker group cares to render $c_1x_1 \geqslant c_2z_2$.

Second, we have seen that even if the above condition does not hold, the legislator's estimate of c_1 may be sufficiently small and/or the estimate of c_2 sufficiently large that both the numerator and denominator of Q are negative. Thus the maintainer has the possibility of satisfying his reelection goal by heeding the wishes of a concerned few, if they exist.

Third, we have seen that in an example of the case just discussed, $Q = .11$. This indicates that our analysis in the preceding section does not extend to the general case. In fact, it is the case that if a maintaining strategy exists via satisfaction of the Type II sufficient condition, $Q \leqslant .5$. To see this, consider the following:

From (3.9), if a Type II maintaining strategy exists

$$c_1z_1 - c_2x_2 = -\epsilon \qquad \text{where } \epsilon \geqslant 0$$

Table 3-3
Decision Problems Illustrating the Conditions for the Existence of Maintaining Strategies

Case 1.	$x_1 = .2$	$x_2 = .1$
	$z_1 = .4$	$z_2 = .3$
	$c_1 = .6$	$c_2 = .3$
$c_1/c_2 = 6/3 > 3/2 = z_2/x_1$. $\therefore$ A Type I Strategy Exists		
$Q = .88$		
Case 2.	$x_1 = .2$	$x_2 = .1$
	$z_1 = .4$	$z_2 = .3$
	$c_1 = .1$	$c_2 = .6$
$c_1/c_2 = 1/6 < 1/4 = x_2/z_1$. $\therefore$ A Type II Strategy Exists		
$Q = .11$		
Case 3.	$x_1 = .2$	$x_2 = .1$
	$z_1 = .4$	$z_2 = .3$
	$c_1 = .3$	$c_2 = .6$
$x_2/z_1 = 1/4 < 3/6 = c_1/c_2 < 3/2 = z_2/x_1$. Therefore, no maintaining strategy exists for this decision.		
$Q = -1.0$ which contradicts the definition of Q as a probability, $0 \leqslant Q \leqslant 1$		

By assumption $z_j \geqslant x_j, \forall_j$. Therefore,

$$(c_1x_1 - c_2z_2) \leqslant (c_1z_1 - c_2x_2) = -\epsilon$$

$$\therefore \text{ let } (c_1x_1 - c_2z_2) = -(\epsilon + \Delta) \qquad \text{where } \Delta \geqslant 0$$

Then

$$Q = \frac{-\epsilon}{-(\epsilon+\Delta) - \epsilon} = \frac{-\epsilon}{-(2\epsilon+\Delta)} \leqslant 1/2 \qquad \text{Q.E.D.}$$

Thus, where a Type II maintaining strategy exists, it will specify that the representative vote with the *weaker* group with probability at least .5.

As one might expect, Type I maintaining strategies specify that a representative vote with the *stronger* group with probability at least .5.[j] The proof parallels the above.

Thus, the behavior of maintainers, too, may reflect a weighing of preferences as well as counting of them. But before theoretical confirmation of our common sense notions makes us too sanguine, let us examine the maintaining strategies more fully. Specifically, how does Q vary as c_1 and c_2 vary? Because Q is meaningful only within a certain range and contains several discontinuities and "steps," one must exercise care in differentiating this function. But differentiating within "smooth" and substantively meaningful ranges, we have the following facts:

$$\frac{\partial Q}{\partial c_1} = \frac{[c_1(x_1+z_1) - c_2(z_2+x_2)]z_1 - (c_1z_1 - c_2x_2)(z_1+x_1)}{[c_1(x_1+z_1) - c_2(x_2+z_2)]^2}$$

$$= \frac{c_1x_1z_1 + c_1z_1^2 - c_2z_2z_1 - c_2x_2z_1 - c_1z_1^2 + c_2x_2z_1 - c_1z_1x_1 + c_2x_2x_1}{[c_1(x_1+z_1) - c_2(x_2+z_2)]^2}$$

$$= \frac{c_2x_2x_1 - c_2z_2z_1}{[c_1(x_1+z_1) - c_2(x_2+z_2)]^2} \leqslant 0 \text{ because } z_j \geqslant x_j, \forall_j.$$

$$\frac{\partial Q}{\partial c_2} = \frac{[c_1(x_1+z_1) - c_2(x_2+z_2)](-x_2) - (c_1z_1 - c_2x_2)[-(z_2+x_2)]}{[c_1(x_1+z_1) - c_2(x_2+z_2)]^2}$$

$$= \frac{-c_1x_1x_2 - c_1z_1x_2 + c_2x_2^2 + c_2x_2z_2 + c_1z_1z_2 - c_2x_2z_2 + c_1z_1x_2 - c_2x_2^2}{[c_1(x_1+z_1) - c_2(x_2+z_2)]^2}$$

$$= \frac{c_1z_1z_2 - c_1x_1x_2}{[c_1(x_1+z_1) - c_2(x_2+z_2)]^2} \geqslant 0 \text{ because } z_j \geqslant x_j, \forall_j.$$

So, as c_1 increases, Q decreases or remains constant, while as c_2 increases, Q increases or remains constant. Amazingly, in the maintainer model with a two-group, heterogeneous constituency, as the probability that the stronger group cares increases, the minimum probability, Q, that the representative must vote with them *decreases or stays constant.* Conversely, as the probability that the weaker group cares increases, the maximum probability $(1 - Q)$ that the representative can vote with them *decreases or stays constant.* Thus, the c_j affect

[j]Note that in the equal c_i case *only* Type I maintaining strategies exist (except in the special case of $x_1 = z_1 = z_2 = x_2$ which makes all strategies maintaining strategies and the denominator of (3.7) zero).

a maintainer's voting in the model precisely opposite to the manner in which they affect a maximizer's voting. In the model, if one's representative is a maintainer, to cause him to raise his estimate that you care may be to work against yourself. Two examples will illustrate this phenomenon.

Example 1: Type I Maintaining Strategy

let $x_1 = .15 \qquad x_2 = .05$

$z_1 = .30 \qquad z_2 = .10$

Case A.) $c_1 = .4$, $c_2 = .4$ $\qquad Q = \dfrac{.12 - .02}{.18 - .06} = .83$

Case B.) $c_1 = 1.0$, $c_2 = .4$ $\qquad Q = \dfrac{.30 - .02}{.45 - .06} = .72$

Case C.) $c_1 = .4$, $c_2 = .6$ $\qquad Q = \dfrac{.12 - .03}{.18 - .09} = 1.0$

Thus, as c_1 increases (.4 to 1.0), Q decreases (.83 to .72). Conversely, as c_2 increases (.4 to .6), Q increases (.83 to 1.0). By effecting an increase in c_1 the stronger group only increases their representative's voting latitude. By effecting an increase in c_2 the weaker group only drives the representative more closely into the arms of the opposition.

Example 2: Type II Maintaining Strategy.

let $x_1 = .24 \qquad x_2 = .20$

$z_1 = .30 \qquad z_2 = .25$

Case A.) $c_1 = .3$, $c_2 = .6$ $\qquad Q = \dfrac{.09 - .12}{.165 - .270} = \dfrac{-.03}{-.105} = .29$

Case B.) $c_1 = .4$, $c_2 = .6$ $\qquad Q = \dfrac{.12 - .12}{.22 - .27} = 0$

Case C.) $c_1 = .3$, $c_2 = 1.0$ $\qquad Q = \dfrac{.09 - .20}{.154 - .45} = \dfrac{-.11}{-.285} = .39$

Thus, as c_1 increases (.3 to .4), Q decreases (.29 to 0), while as c_2 increases (.6 to 1.0), Q increases (.29 to .39). Again the raises in c_i lead to counterproductive results from the standpoint of constituents. If the maintainer model has any resemblance to reality, findings attesting to voter ignorance may not illustrate irrational or even nonrational behavior; quite the contrary. To communicate with one's representative before a vote might backfire if he happens to be a maintainer.

There is, however, one fairly important qualification to the preceding remarks. Sufficiently large increases in the c_i may alter the strategic situation which exists; i.e., to one of no maintaining strategy, or from a Type I to a Type II strategy or vice versa. If a Type I strategy exists, the stronger group should never make an effort to raise c_1, but the weaker group might try to raise c_2 in an effort to change the strategic situation; i.e., from Type I to Type II.[k] Of course, if the weaker group fails to raise c_2 enough, they may end up in a position worse than the initial one. If a Type II strategy exists, the same conclusion holds with the roles of the groups reversed.

Well, we have a logical fact that changes in the c_i produce differential changes in the numerator and denominator of (3.7). Just how meaningful is that fact? Many will find the interpretation of the mathematics so counterintuitive that they will reject it substantively without further ado. What does such a rejection imply? What assumptions are driving the maintainer model in the conflictual, unequal c_j case?

Well, to begin with the arguments just presented are not terribly robust. For example, if we go from the two-group case to the n-group case with two or more contending groups on each side, Q may increase, decrease, or stay constant as any particular c_j varies. Similarly, if we do not assume independent c_j, the dependence of Q on the c_j is indeterminate. Finally, if we allow the c_j to be dependent on the x_j and z_j, we cannot make the *ceteris paribus* assumption necessary for partial differentiation. Thus, one or more of the simplifying assumptions utilized in the analysis may be giving rise to the peculiar behavioral pattern found in the model world. As these assumptions are relaxed, unusual substantive conclusions may disappear. Still, the counterintuitive conclusions simply give way to indeterminate situations as we relax assumptions. Given

[k]To elaborate, if a Type I maintaining strategy exists (i.e., if $c_1x_1 \geqslant c_2z_2$), Q increases toward 1.0 as c_2 increases. But if it is possible; i.e., if $c_2 < 1$, for c_2 to increase to the point that $c_1x_1 < c_2z_2$, Q becomes at first greater than 1. Since Q is a probability restricted to the interval [0, 1], we consider Q undefined at these values of c_2. Nevertheless, if c_2 continues to increase, at some value the negative term $(c_1x_1 - c_2z_2)$ may equal the positive term $(c_1z_1 - c_2x_2)$. At this value of c_2, the denominator of Q is zero–a mathematical discontinuity. Beyond this point Q is negative for a time–again a defined discontinuity. Finally, if it is possible for c_2 to increase still more, we may reach the point where $c_1z_1 \leqslant c_2x_2$, the realm of the Type II maintaining strategy, whereupon Q leaps into the interval [0, .5], and then increases to .5 if a further increase is possible; i.e., if c_2 still is less than one.

particular values of the theoretical variables the counterintuitive dependence of Q on the c_i may still hold. Given other values, common sense conclusions may follow.

Simplifying assumptions aside, the maintaining notion itself probably bears much of the responsibility for any surprising analytic implications. After all, even in the presence of simplifying assumptions the maximizing notion produced no jarring conclusions. To digress momentarily, we have investigated a variant of the maintainer model in which p^* remains forever constant rather than "tracking" p. Thus, a representative typically finds himself an amount, ν, away from p^* and votes so as to return to p^* on each vote. In that variant if ν is positive, $\partial Q/\partial c_1$, is strictly negative, while $\partial Q/\partial c_2$ is indeterminate. If ν is negative, $\partial Q/\partial c_1$ is indeterminate while $\partial Q/\partial c_2$ is strictly positive. Perhaps it is the case that satisficing models simply will produce some strange consequences when applied to real situations even if few simplifying assumptions are present.

Of course, there is one further possibility: namely, that the peculiar behavior observed in the model actually occurs empirically. More than a few observers have noted that pressure can be counterproductive.[2] Consider the familiar "profiles in courage" on the part of our representatives. A highly controversial bill will come to the floor for a vote. Various interests carry out active lobbying, a few dire threats are heard, and, no doubt, someone rises in debate to say that in all his ___ years in _______, he has never seen such intense, unashamed pressure politics. But in the end, some representatives bravely stride forth apparently to vote their consciences and/or the public interest. Without downplaying entirely courage, integrity, and other admirable qualities, one might note that in the model world, such activities are far less dangerous and thus less courageous than they appear. Take, for example, organized labor's intensive lobbying effort during passage of the Landrum-Griffin Bill in 1959. Supposing that labor is the weaker group (vis-à-vis management) in most Republican constituencies, by threatening Republican Congressmen, labor only was lessening the probability that Republicans could vote against the bill. And, in taking an antilabor stand in the face of fierce pressure, Republican Congressmen's courageous behavior happened to coincide with allowable voting according to our analysis.[3] In view of the not-infrequent occurrence of incidents like this, perhaps the conclusions of the conflictual two-group maintainer model should not be dismissed so quickly.

In any case, we do not regret the opposite conclusions the analysis implies about the effects of varying c_i on maximizer and maintainer voting. At best, the conclusions are empirically accurate, in which case we have learned an extremely interesting fact about legislative behavior. At worst, one set of conclusions (most likely about the maintainer) is empirically wrong, in which case we have some idea of which theoretical ideas deserve no further attention. Either way, we have increased our knowledge.

To summarize then, the analysis implies the following conclusions about voting behavior in the two-group conflictual case:

1. When $c_1 \geqslant c_2$ maximizers vote exclusively with the stronger group: if $c_1 < c_2$ they may switch allegiance to the weaker group if (3.6) holds. In neither case will the vote necessarily result in a nonnegative change in probability of reelection.
2. Maintaining strategies may not exist. If a Type I strategy exists, a maintainer must vote with the stronger group with probability at least .5. If a Type II strategy exists, a maintainer must vote with the weaker group with probability at least .5.
3. As the probability that a group cares increases the likelihood that a maximizer votes with them also increases. But for maintainers the opposite is true. As the probability that a group cares increases, the probability that a maintainer must vote with them decreases or remains constant.
4. Maximizer voting varies with group strength only to the extent that (3.5) or (3.6) holds. Maintainer voting varies with group strength in no consistent pattern.

Overall, we find that in the general case of the two-group conflictual constituency the previous implications for the voting behavior of marginal representatives are reinforced. Maximizing strategies may involve choosing the least damaging position. Maintaining strategies may not exist. Whether the c_i are equal or unequal, high or low, representatives may not be able to use their votes to increase their probabilities of reelection. Thus, a representative whose district customarily displays heterogeneity of interests will face a more difficult task in casting his roll-call votes than a representative whose district customarily displays homogeneity of interests. Again, heterogeneity makes marginality more likely.

Implications

In this chapter we have examined a simple model of constituency influence on representative' roll-call voting. Our primary effort has been to analyze and compare voting decisions given consensual or conflictual constituency configurations. In this concluding section we wish to discuss some implications of the analysis for the study of constituency influence.

We will only briefly mention a persistent theme of the chapter. Because of the structure of the respective decision problems, representatives whose districts tend to be consensual on most votes can render and maintain their seats safe by voting intelligently. Conversely, representatives whose districts tend to be conflictual on most votes may have no way (within the model) to increase or maintain their probabilities of reelection. They are between the proverbial fire and frying pan. Thus, the model provides a simple explanation for the oft-noted empirical correspondence between district homogeneity and electoral safety on the one hand, and district heterogeneity and electoral marginality on the other. Enough said, until Chapter 5.

One of the general implications of the model is extremely significant for the interpretations of existing empirical studies of constituency influence on roll-call voting. Recall that roll-call voting behavior in the model does not vary in any nice linear fashion with group strength. Let us push this finding a bit. Consider a group of representatives who vote on a number of similar labor bills and estimate that c_L for labor equals c_B for business on each bill. Now, assume that some constituency demographic characteristic (e.g., percent blue collar) correlates perfectly with group strength in the district. Thus, in districts which include 0 to x percent blue collar, labor is the weaker group, while in districts which include x to 100 percent blue collar, labor is the stronger group. How will our sample of model representatives behave? For maximizers the theoretical pattern will appear as in Figure 3-1. For maintainers the pattern will appear as in Figure 3-2. Now, if one were to regress labor support on percent blue collar, what would the statistics show? For maximizers, maintainers, or any mixture of the two, linear regression would estimate a positive relationship but a poor fit--exactly what numerous empirical studies show. Furthermore, if some dichotomous variable (e.g., party?) were highly correlated with labor's position as the stronger or weaker constituency group, then controlling for that variable would result in no statistical relationship within subgroups for maximizers and only coincidental relationships for maintainers. Thus, in our model–*a model in which constituency is the primary influence on legislative voting behavior*--the application of commonly used statistical techniques would lead to the erroneous

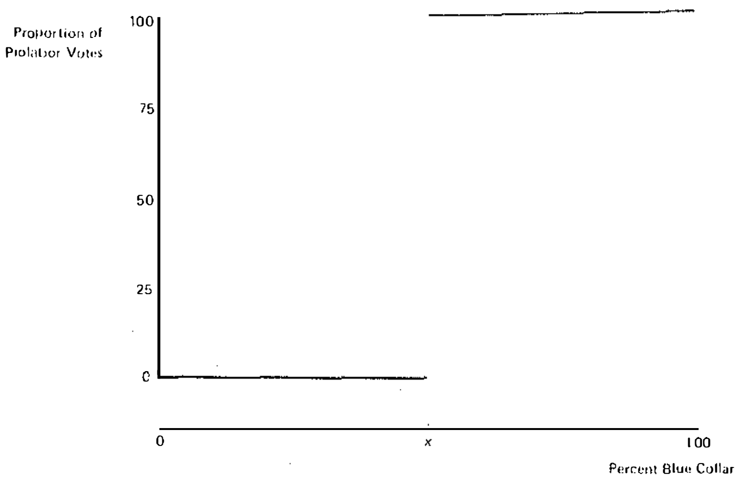

Figure 3-1. Predicted Proportion of Prolabor Votes by Maximizers.

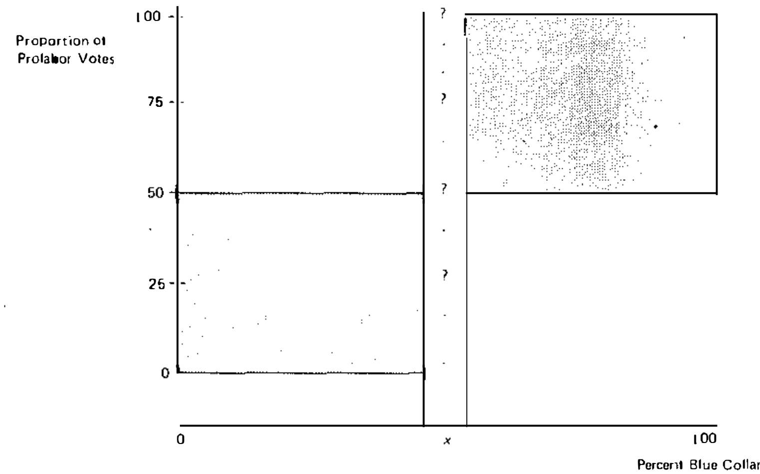

Figure 3-2. Predicted Proportion of Prolabor Votes by Maintainers.*
*The exact locations of data points within the Northeast and Southwest quadrants depends on the particular values of the x_i, z_i. A priori there is no reason to expect any given patterning rather than another.

conclusion that at best, constituency influence operates through the party medium, and at worst, that no constituency influence exists.[1] Too often researchers write as if the only alternative to a linear relationship were no relationship. But statistical models applied to data contain implicit behavioral models. If these implicit models are wrong, the substantive conclusions drawn are likely to be wrong also.

On a more positive note, the model provides a number of testable propositions, although data difficulties cannot be minimized. Of course, our conclusions do not resemble the "simple" familiar empirical propositions. Nowhere do we hypothesize that "scores on scale x increase monotonically with percent urban

[1]For those not familiar with the statistical analyses referred to, we present an example. Using simple linear regression, we have estimated the relationship between AFL-CIO COPE scores and percent blue collar in 323 non-Southern Congressional districts for the 88th Congress. According to traditional hypotheses, support for organized labor will increase as the proportion of blue collar workers in a district increases. Such in fact is the case: $Y = 37.05 + 1.42X$, $R^2 = .09$, a weak relationship to be sure, but not atypical of those political scientists ordinarily find. Yet when we split the data set by party, for Republicans ($n = 171$) we get $Y = 10.8 + .27X$, $R^2 = .01$, while for Democrats ($n = 157$) we get $Y = 77.05 + .31X$, $R^2 = .04$, negligible relationships. Thus the typical conclusion: controlling for party eliminates the appearance of constituency influence. But we know that percent blue collar is related to electing Democrats rather than Republicans. Thus we have the situation discussed in the text above. If our theory were correct, constituency influence would be present but the method would not uncover it.

as defined by the Census Bureau." Instead we present the somewhat more complex relationships implied by Equation (3.7) and the discrete rather than continuous relationships predicted for maximizer voting. But any criticism on this score seems misplaced. In rationalizing why their correlational methods account for so little of the variance in roll-call voting, researchers frequently point to the "complexity" of the voting decisions–the "myriad forces which impinge upon the legislator." We too, are saying only that the relationship between constituents' preferences and the voting decision is a bit more subtle than heretofore admitted. Hypothesizing that roll-call voting is linear with demographic characteristics of constituencies is just *too* simple. At least our analysis suggests that is so.

Additionally, empirical researchers may be somewhat disappointed by the unfamiliar terms in which our conclusions are stated. We do not say that Southern Congressmen are most bound to their constituents on civil rights votes, or that mid-western Republicans are most bound on farm price support votes. Instead we speak of strong and weak groups, increasing and decreasing c_j's, etc. Searching for regularities on the level of specific groups and issues involves searching on the wrong level in our opinion. These particular groups and issues may determine the values of the x_j, z_j, and c_j. But generalizing about the values of the decision components, which may be quite variable and short-lived, seems far less profitable than generalizing about the way in which the components, whatever they are, affect the decision. If our theory is tested and not falsified, statements about Southern Democrats, mid-western Republicans, gun-control votes, foreign-aid votes, etc. may be made on the basis of the test, *but they hold only because at the time of the test they affected the theoretical variables in a particular way.* Ten years from now particular substantive statements might be reversed while the general propositions of the theory could be supported to the same degree as before.

We realize that some of the propositions advanced may strike the casual reader as rather obvious hypotheses that common sense unaided by decision theory would have suggested. Perfectly true. But a theory which implied exclusively nonobvious propositions would probably be wrong; i.e., falsified. The fact that some of the theoretical propositions appear perfectly acceptable and expected provides an indication that we are on the right track and encourages testing the less obvious implications.

Notes

1. Robert Dahl, *A Preface to Democratic Theory* (Chicago: University of Chicago Press, 1956), Chapter 4. Wilmoore Kendall and George Carey, "The Intensity Problem and Democratic Theory," *American Political Science Review*, 62 (1968), 5-25.

2. Raymond Bauer, Ithiel de Sola Pool and Lewis A. Dexter, *American Business and Public Policy* (New York: Atherton, 1968), pp. 442-443.

3. For a study of Landrum-Griffin see Samuel Patterson, *Labor Lobbying and Labor Reform* (Indianapolis: Bobbs-Merrill, 1966).